

Geo-location by proxy

Approaching VGI from the perspective of geographic context

Jeroen Verplanke

Faculty of Geo-Information Science and Earth Observation – ITC
University of Twente, the Netherlands





On Context





Outline

- A couple of frames
- A statement
- A concept that binds these frames
- An explanation
- A realization



A couple of frames

“location is everything”

versus

“problems are political”



A Statement

V G I



Connecting the frames

- But problems are not derived from locational context they are derived from a political context –
- The context of a problem and its location are disconnected from the political problem context.

Context is the connecting element

Location, location, location



Context, context, context



Politics, politics, politics



VGI and a reuse example

- VGI is playing a role in providing location and context of problems. Reuse of VGI is a common source of information in disaster response and crowd control.



VGI and a reuse example

- In the instance of disasters or emergencies the gap between problem context and political context is minimized,
- Different policy agendas for relief and prevention
- distinction between authoritative and non-authoritative is made.
- a “trusted” entity or actant, is needed.



Reuse of VGI

- VGI describes a place with an event. The attributes of the VGI combined with the contextual content provide a location.
- No reuse without verifiable location information
- Provenance is important but not leading
- The issue is content



A concept to bind them

- So the “location is still everything” before the information can become part of a political problem
- Usability of GI can be based on location, context and purpose.
- To retrieve this the information must be processed and for this the entity or actant *is* required.
- Most of the “qualitative assessment” of VGI requires moderation by a person before it can be reused.



To address the “V”

- “purpose” is set to third place after location and context.
- The ethical and legal debates regarding reuse are very important but without the first two dimensions there is little purpose in reuse.
- Provenance is however more interesting in the debate about authority

Location

- *Locatability*: the ability to determine (the level of accuracy of) the location information provided with VGI.





Context

- *Contextuality*: amount of locational or environmental context provided with VGI, to determine the location of the VGI subject, in order to validate the locatability of VGI.

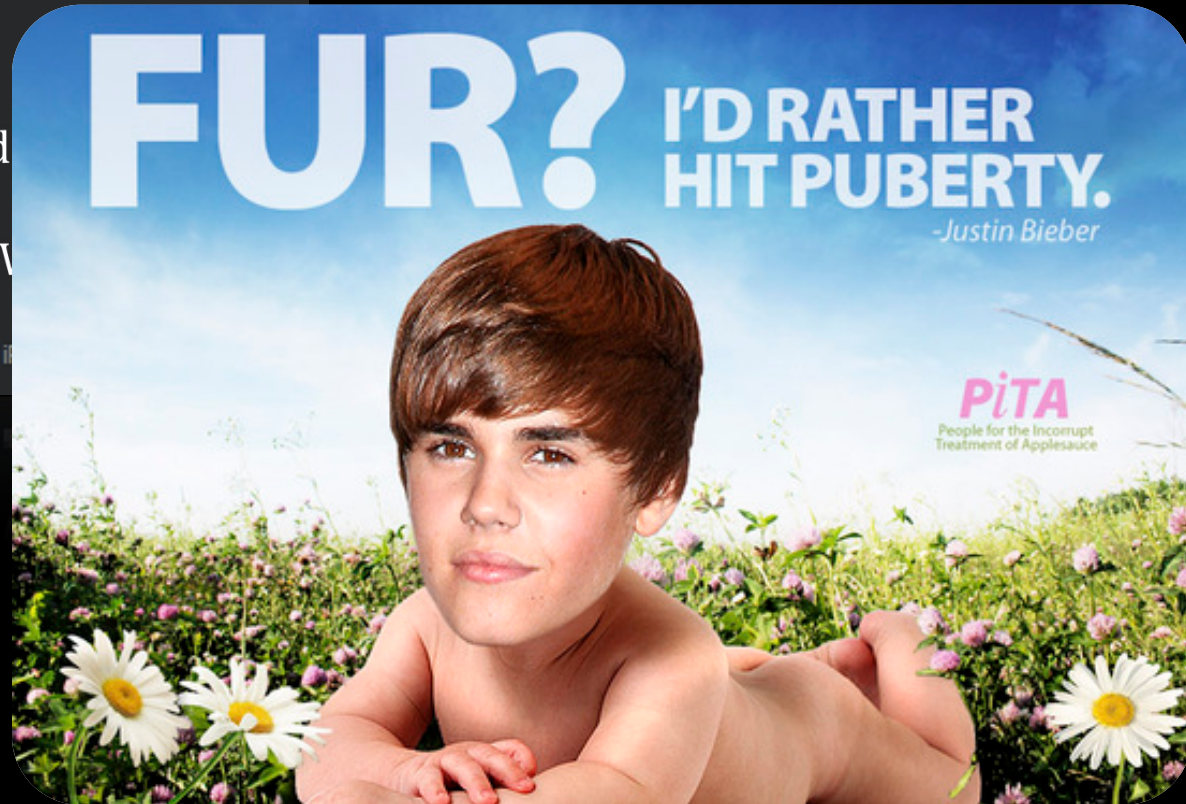
Importance of context

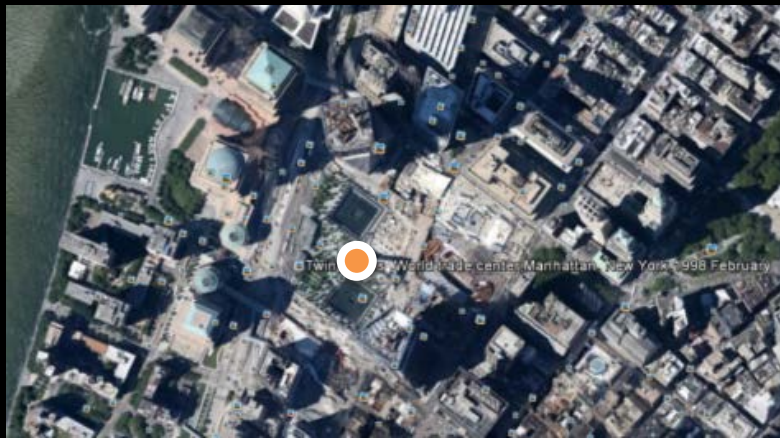


Furries Xtreme
@furriesxtreme

Hey #AAG2013 do
like #furries ?
<http://goo.gl/euV>

7:18pm - 10 Apr 13 - Twitter for iPhone





**Twin Towers World Trade Center
Manhattan 1998 February**



Manhattan Twin towers



**Ambiguous subject, right location
(picture showing)**

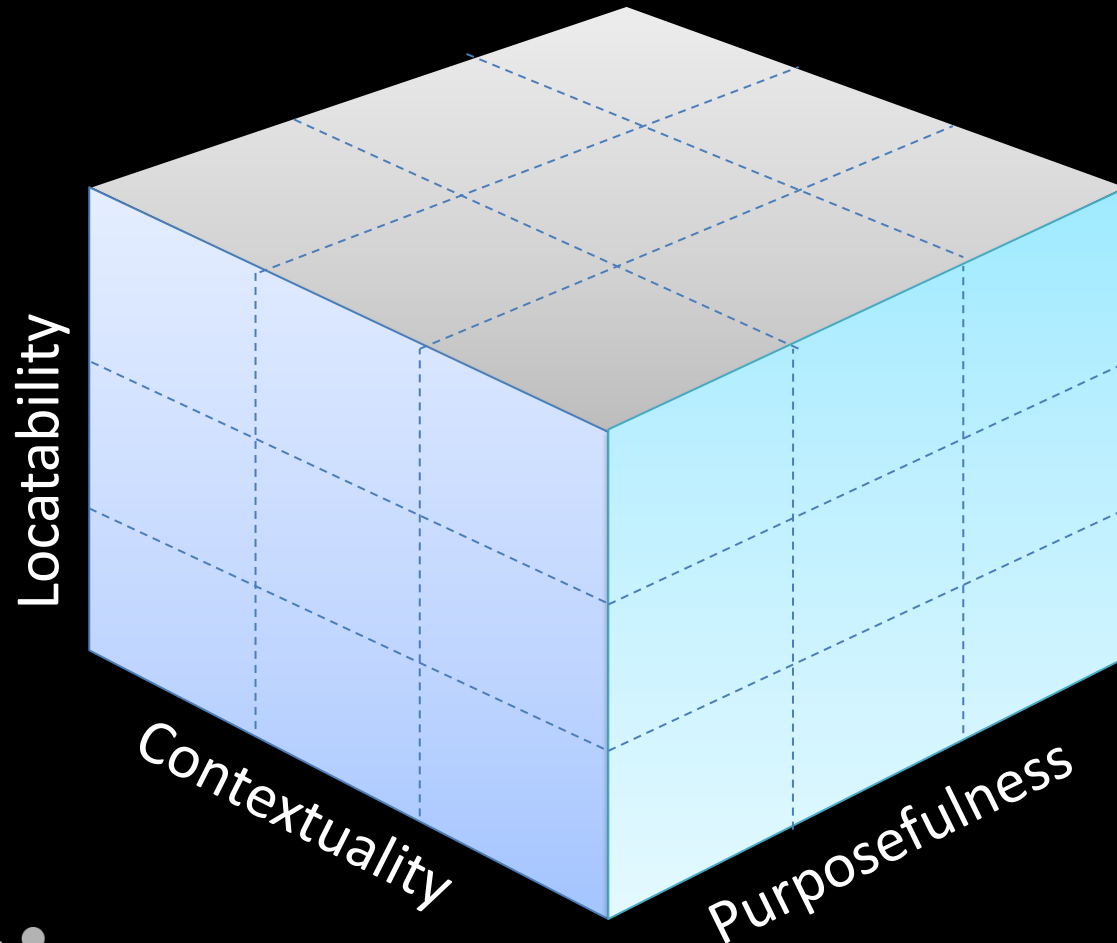


**Right subject, wrong location
(picture taken)**

Purpose

- Purposefulness deals with the question whether the information is actually mined from volunteered or contributed data.
- *“the simple distinction between Volunteered and Contributed GI (opt-in vs. opt-out) is valuable for the data’s fitness for use”* (Harvey, 2013) links purposefulness to reusability.

3 Dimensions of VGI





Feeding the conduit

The geoweb as a conduit for information

“the geoweb is an assemblage of heterogeneous networks that are designed to enable, steer and monitor the ~~mobilities and actions~~ information generated by people and things ...” (T Straube, 2013)

Adding a conductor



- Authority to reject or approve
- Direction for route and destination
- Understanding of context, purpose and relevance.

An example

SBTF crisis-mapping support



- Information from different sources
- distributed on the basis of information content and attributes.
- The SBTF receives information, (has it) analysed and processed, and forwards it.
- Without this conductor the information cannot be effectively used for disaster response.



(Adding) a conductor

- The conductor is not something to be introduced or created. It exists already.
- It is a network actor/actant represented by persons, groups of people or automated systems and combinations of these.
- Suggestion is to give it a distinct place and the attention it deserves as there is no reuse of UGGI without the conductor



A realization

- Research and development in the coming years will find out to what extent the human eye remains the crucial component of the conductor
- The Conductor has an important role in the Geoweb, it is the oil or glue, flow or wall of information provision.



To close ...

“a conductor creates art out of music”
but can also be the
“dark matter of the Cloud”.

Comments and clarifications

